



Work-Based Learning

AN EMPLOYER'S GUIDE



www.changetheequation.org



TABLE OF CONTENTS

Introduction	2
What Is Work-Based Learning, And Why Is It Important?	3
What Is In This Guide?	3
What Are The Benefits Of Work-Based Learning?	4
How Do Work-Based Learning Opportunities Get Started?	5
How Can You Get Involved?	5
How Can You Put The “Learning” In Work-Based Learning?	6
How Do You Connect With Young People?	8
What Logistical Issues Should We Be Thinking About?	11
Work-Based Learning Activities	15
Section 1: Career Fairs	15
Section 2: Classroom Visits	21
Section 3: Company Tours	29
Section 4: Mock Interviews	35
Section 5: Informational Interviews	41
Section 6: Job Shadows	47

Introduction

Businesses in every industry need workers with strong STEM skills, but employers often struggle to find these workers. One critical way to help bridge the STEM skills gap: supporting work-based learning opportunities for students during the K-12 years.

This guide is aimed at helping employers understand the ins and outs of work-based learning—and how to make it successful for businesses and students alike. Most work-based learning guides are for people in schools or school districts. This one is designed specifically for corporate volunteer coordinators and STEM professionals who want to help K-12 students better understand STEM in the work place. The goal of the guide is to help you ensure that work-based learning experiences deliver on the promise of getting students excited about STEM careers while expanding their understanding of the skills today's workers need to succeed.

In the following pages, you'll learn what work-based learning is, why it's important, and how employers and STEM professionals can work with schools and teachers to do it well. The guide also offers clear instructions on how to design and implement key work-place learning activities, including career fairs, job shadows, and more.

Today's students are tomorrow's workers. Work-based learning can start them on the path to a successful life.

What Is Work-Based Learning, and Why Is it Important?

Millions of young people across the country have never met a STEM professional and know little or nothing about the STEM jobs that could give them a bright future. As a result, students who have the potential to succeed in STEM careers often don't explore the most promising STEM pathways in their schools or communities.

Work-based learning experiences can change that.

Work-based learning refers to a variety of activities that introduce young people to working professionals and help those young people understand jobs, careers, and the skills that are essential in today's workforce.

Work-based learning can occur in a workplace, in school, or in the community.

Experts generally divide work-based learning into three categories:

Career Awareness. These activities are designed to help students develop basic awareness of jobs and careers by interacting with STEM professionals. Another focus: helping students understand the education and skill requirements for success in various fields. Examples of these activities include career fairs and classroom visits by working professionals.

Career Exploration. These activities provide students with more in-depth opportunities to learn about jobs and careers in specific fields. Students interact with working professionals in the work environment; in some cases, students actually get to experience the rhythms and requirements of the modern workplace. Examples of career exploration activities include job shadows, informational interviews, mock interviews, and company tours.

Career Preparation. These activities provide students with opportunities to gain actual work experience that support the development of key job skills. Examples of career preparation activities include internships, apprenticeships, and paid summer employment.

What Is in This Guide?

This guide currently focuses on career awareness and career exploration activities employers can support. Future versions of the guide will include information about career preparation strategies as well.

Following an introductory overview of work-based learning and how to make it a success, the guide provides information and pointers related to six specific work-based learning activities. You can browse through the entire publication to get a better understanding of the range of work-based learning possibilities. Alternatively, if you are designing or

participating in a specific activity covered in the guide (such as Career Fairs or Job Shadows), feel free to go straight to that section for specifics. The six activities we cover in the guide are:

- **Career Fairs.** School-sponsored Career Fairs (also known as Career Days) are ready-made opportunities to get in front of students and share good information about your company, your job, and the skill requirements in your industry. Page 15.
- **Classroom Visits.** When professionals visit the classroom to talk about their jobs, it's a great opportunity to help students gain exposure to STEM careers and see the relevance of their classroom studies to the world of work. Page 21.
- **Company Tours.** Providing opportunities for students to tour your workplace helps them gain a firsthand understanding of your company and industry, as well as the technologies and skills employees use in STEM-related jobs. Page 29.
- **Mock Interviews.** Mock interviews allow students to think about what they offer to prospective employers, how to present themselves and articulate their strengths, and how to make the case that they are right for a job. Page 35.
- **Informational Interviews.** Informational interviews offer a one-on-one opportunity for students to find out more about jobs and careers in the STEM fields from the experts: STEM workers themselves. Page 41.
- **Job Shadows.** Job shadows introduce students to the day-to-day realities of today's workplace and the skills they need to succeed. They also provide employees with an enriching opportunity to share their hard-won knowledge and experience. Page 47.

What Are the Benefits of Work-Based Learning?

Research on work-based learning shows clear benefits for students and employers alike.

Benefits for Students

- Students become more interested in STEM careers.
- Students connect what they are learning in the classroom to the education and skills required for success in today's workplace.
- Students explore and learn about various fields and careers so they can make more informed decisions about their goals in life and the education they need to reach those goals.
- Students become more motivated to do well in school and pursue postsecondary education.
- Students gain an understanding of workplace norms, including the "soft skills" that can influence career success.

- Students in career preparation programs (such as internships) gain valuable work experience that can launch their careers.
- Students have opportunities to interact with and learn from an expanded circle of adults and potential mentors.

Benefits for Employers

- Employers have opportunities to nurture student interest in jobs and careers with their company and in their industry.
- Employers help future workers understand the education and skills they need to secure jobs and be successful employees.
- Employers advance their reputation in their communities as supporters of education, community leaders, and providers of good jobs.
- Employers form stronger partnerships with local schools and help ensure that the curriculum is supporting the development of essential skills.
- Employers provide their employees with valuable opportunities to serve as ambassadors for the company and to hone their public speaking, communications, and leadership skills.
- Employers improve employee retention by boosting employees' job satisfaction and sense of purpose.
- Employers have the opportunity to audition future potential applicants.

How Do Work-Based Learning Opportunities Get Started?

Work-based learning activities can be initiated by schools or by employers. Often, a school or teacher will reach out to employers to explore their interest in participating in a work-based learning activity such as a career fair or classroom visit. Alternatively, employers who want to support local schools and their students can also contact school officials to propose specific activities, or to explore potential collaborations.

How Can You Get Involved?

Tap into existing relationships with schools and communities. Many companies have relationships with schools and other organizations in their communities, and some maintain formal employee volunteering programs in partnership with these organizations. If you are a STEM professional who would like to get involved, you can check in with colleagues or your company's Corporate Social Responsibility (CSR) team to see if they have such relationships and how you might participate in them.

Reach out to create new partnerships. If your company lacks such relationships, ask your supervisor or CSR Team if they can help you forge them. If such partnerships prove impossible, explore work-based learning opportunities offered by outside organizations, such as STEM-focused professional societies.

Check in with Human Resources. Many of the work-based activities described in this guide take place during companies' normal business hours, so consult your HR department to determine whether you need to take leave to participate. Some companies offer employees paid time for volunteering each year, yet even those companies may limit the kinds of volunteering eligible for paid time.

How Can You Put the "Learning" in Work-Based Learning?

High-quality work-based learning is the result of strategic thinking, thoughtful design, and reflective implementation. The key is to identify learning goals up front (preferably in concert with the teacher or school), and then to create a program or activities that meet those goals head-on.

Work-based learning activities will have the greatest educational impact if they connect to what students are learning in school. Depending on the company, the industry, or the type of job that is the focus of work-based learning, the experience can show students how employees apply their understanding of STEM and other core school subjects. By demonstrating the connection between workplace success and actual classroom content, employers provide students with added incentives to do well in school and keep learning.

Connecting work-based learning to the classroom requires close coordination between the employer and the teacher or school before, during, and even after the work-based learning event.

Schools are among the most common partners for employers in implementing K-12 work-based learning programs. However, other organizations, such as afterschool programs or robotics clubs, can be equally important partners in such efforts. While this guide refers primarily to schools and teachers, the lessons it shares are just as appropriate for STEM professionals who work with other partners.

BEFORE THE ACTIVITY

The success of work-based learning depends in large part on how the school or the teacher plans to prepare students for the experience and integrate it into what students are learning in class. That said, employers play a critical role in ensuring the quality of the experience by working closely with schools to plan the event well before it begins.

To ensure strong coordination, and to find out more about how the teacher or school is planning to prepare students, a participating employer or employee should come to the school or teacher with questions such as:

- What does the school or teacher want the students to get out of the work-based learning experience?
- Have the students been asked about their career interests or knowledge of STEM careers? If so, what were the results?
- Has the school or teacher asked students to learn anything about STEM jobs or industries—through preliminary research, for example?
- Is the work-based learning activity for students tied to a specific course—for example, a biology or math class? If so, what is the class studying right now?
- Are there current or recent school projects that might be related to the employer's business and industry?
- What technologies are the students using in school? Are there lab and technology classes where students are able to do hands-on work in the sciences and computer programming, for example?
- Do students have plans for their education beyond high school? If they are high school students, have they applied to colleges? How many are considering career and technical programs? What college and career counseling have they received/are they receiving?
- Is the school or teacher planning to undertake follow-up activities with the students? If so, what are those activities, and how can the employer help?

With answers to these types of questions in hand, employers will be better able to plan work-based learning activities that reinforce and expand on the students' school experiences.

DURING THE ACTIVITY

The connection to the classroom should be explicit and clear during work-based learning activities. For example, whether leading students on a company tour or conducting an informational interview, an employee can help students connect the relevance of their current school work to the employee's work in the company. Answers to questions outlined under "Before the Activity" above can help you tailor the experience to align with what

students are learning in school. For example, if you find out that some of the students are taking a statistics class, that can form the basis for a discussion of how you apply statistical analysis in your work.

AFTER THE ACTIVITY

A work-based learning activity will have more impact on students if they have opportunities to reflect on what they learned and how it affects their thinking about jobs and careers. Employers can encourage and help teachers and schools to engage students in follow-up activities such as: structured classroom discussions; student presentations and papers about their experience; and classroom projects inspired by the experience. For example, the teacher could assign student teams to develop a marketing campaign for one of the company's products, with the employer judging the winner.

When it's all over, don't forget to evaluate the outcome of your effort! Evaluations can help you document the impact of your company's participation, make the case for continued involvement in work-based learning, and identify how to have more impact in the future. First, get feedback from the school or teacher. Also consider working with the school or teacher to create a short survey of students to determine how well the activity realized its learning goals. The survey could explore:

- how the activity influenced students' thinking about their education and future careers;
- the extent to which the activity improved students' understanding of what STEM professionals do and the kinds of education and training they need to pursue a STEM career; and/or
- if appropriate, the number of students who want to pursue further work-based learning activities.

How Do You Connect With Young People?

Communicating with young people is not the same as communicating with adults. Here are some tips for making a lasting impression on the young people:

Be prepared. Students can be a tough audience. They may not hide it as well when they are bored or made restless by a dragging or disjointed presentation. If you're giving a presentation, outline it and practice it a few times before you get there so you have it down pat.

Warm them up. Instead of diving straight into a one-way presentation, start by engaging the students in some up-front conversation and reflection. For example, ask what they know about your company and the industry, or get some initial information about their

favorite subjects in school, even if it's through a show of hands. This gives you some touchpoints to return to throughout the presentation.

Don't talk down. Students will know when they are being talked down to. Balance the need to provide some basic information about your job and industry with deeper content about how your work. Prepare a presentation and discussion that respects students' knowledge and experience and that leaves them with an in-depth understanding of your company and your work. (Please see the sidebar, "Key Questions to Cover for Students," page 10, for some guidance on core content for work-based learning.)

Keep it interactive. It's important to keep the presentation feeling like a dialogue throughout. Keep asking questions so students have the opportunity to participate in the conversation and demonstrate their knowledge. If possible, let them test drive technology you use every day, and give them authentic, real-world challenges to solve.

Tell good stories. Ground your presentation in engaging anecdotes about your own time as a student, what you were doing when you were their age, how you got your job and your experiences on the job. Students also will respond to interesting or engaging anecdotes about your work—a major project that almost failed, winning a big contract and what it took, high-profile examples where your product or service is used for social-benefit (e.g., disaster relief, national defense, public safety, environmental cleanup, etc.).

Keep it simple. At the same time that you don't want to talk down to students, you also don't want to confuse them. Keep your presentation focused on three or four things you want students to know about your job and your company. And avoid the jargon—be sure to explain acronyms, workplace lingo, the different responsibilities that go with different jobs, etc.

Be open to questions. Remember: Almost every question is a good question, and all questions should be treated with respect.

Know your Audience

It's a critical reminder for anyone who is giving a speech or a presentation: if you don't know your audience, it's a good chance you will fail to connect.

Employees who are speaking to students and student groups in the course of a work-based learning activity should have a good sense of the students up front, including what they're studying in school, their extracurricular interests and more.

Employees also should keep in mind that they may be addressing diverse groups of students during these activities—including girls, boys, students of color, students

from different economic backgrounds, and students with disabilities. To communicate effectively across all these groups, it's important to keep a few things in mind:

- If possible, make sure students see and hear from a diverse mix of employees so all students can see a place for themselves in your workplace and your industry. That includes men and women, employees from diverse racial and ethnic backgrounds, and employees of all ages (including younger employees who might be able to relate more directly to the students).
- If you are talking to students about prominent engineers, mathematicians or business leaders, make sure to include a racially—and gender—diverse group of people on the list.
- Try to emphasize the importance of diversity to your work and the company's success—and how businesses benefit when employees bring a range of experiences and perspectives to the work.
- Remember that different students may respond to different messages. For example, studies show that girls are more likely to consider careers in the sciences or engineering when the work is framed as making a positive difference in the world. Similarly, employees should remember that students from schools with fewer resources often do not have the same opportunities as those from wealthier schools to take part in advanced classes or enrichment activities like robotics.
- At the same time that you want to make diversity a priority, avoid calling out the race, gender or socioeconomic status of students in the audience. The best approach is to speak broadly about opportunities in your field, about your industry's impact on the world, and about the skills required to succeed.

Employees may want to consult with human resources personnel and, if applicable, the company's diversity training professionals, for additional pointers on how to develop activities and messages that resonate with diverse groups.

Key Questions to Cover for Students

Employees participating in work-based learning activities should be prepared to provide answers to a range of student questions about their work, their company, and their industry. These questions include:

- What does your company do, and to what extent is it operating in a thriving industry?
- Why is your company's work important and relevant? What key problems does the company address in the world?

- How does the company express its values through activities such as honoring diversity, supporting important community causes, protecting the environment, etc.?
- What are the job and career opportunities in your company and your industry?
- Are these job opportunities likely to increase in the years ahead, and in what job areas do you see the most growth?
- What it is like to do your work (including a description of your typical day and your responsibilities)?
- What are the educational and skill requirements for people in your position? For others in the company and the industry?
- What are some of the skills you apply on the job on an everyday basis, including math, science, writing, communications?
- How much do you work alone, and how much do you work as part of a team?
- What is the salary range for people in your field?

What Logistical Issues Should We Be Thinking About?

In preparing to host students for work-based learning activities at a company location, it's important to know company rules and other requirements. The following are some of the key departments and/or personnel you may want to consider contacting in advance of the activity to make sure everything goes smoothly.

Note that that this is not an all-inclusive list, nor will an employer have to perform the same level of due diligence for every activity.

Human Resources

Your Human Resources department can provide information on visitor processing, as well as advice and outreach on how to engage employees to participate in work-based learning activities. Discussions with human resources staff may include:

- options for getting employees involved during work hours;
- special considerations/guidelines when employees are working with minor-age students as mentors, interviewers, etc.;
- cultural, language or disability barriers; and
- availability of company background material and giveaways (used in recruiting).

Security

Your security office will need notice of student visits well in advance. Depending on the nature of the business, access to the company may be relatively easy or fairly difficult. Discussions with security staff may include:

- understanding identification and notification for student visits (e.g., Social Security Numbers, citizenship status, name, age, picture identification, etc.);
- badging requirements;
- escort requirements (e.g., is an escort required at all times?);
- areas available for touring vs. those that should not be accessed;
- use of cameras or other photographic equipment by students;
- safety equipment required (ear plugs, safety glasses, etc.);
- information on environmental issues (air, noise, etc.);
- parking and drop-off/pickup locations for school vehicles while students are on site; and
- mobile device restrictions.

Information Technology/Information Protection

You may want students to have access to company information systems or databases while at the workplace. Information Technology staff can advise on the feasibility and/or restrictions related to student use of these systems, as well as other technology-related issues. Discussions with information technology staff may include:

- system access requirements (names, passwords, etc.);
- systems that can be used by students or company representatives for demonstration purposes;
- ability of students to bring their own computing equipment to the business; and
- what information can and cannot be shared with students.

Communications

Communications staff can provide material for sharing with student visitors, as well as support for overall messaging and public relations tied to the work-based learning activity. Discussions with communications staff may include:

- preparing internal and/or external articles on the visit, plus coordination with school communications personnel;
- understanding photographic or other releases required, including whether parental releases are needed for photos taken of students during the visit; and
- supporting employees to develop informative and engaging presentations for students, including support for video and multimedia presentations.

Legal

Legal staff can help ensure that work-based learning activities are planned with an understanding of legal risks associated with student visits. Discussions with legal staff may include:

- special considerations for hosting minor students;
- any issues connected to fair labor laws as they relate to student engagement in actual, hands-on work activities; and
- liability and insurance issues while the students are on company property.

Finance

The company's finance staff can help assess how costs for the work-based learning activity will be handled. These may include food, transportation, personnel, gifts, or other costs. Some of these may be appropriately designated as company donations.

ACTIVITIES

SECTION 1

Career Fairs

School-sponsored Career Fairs are a ready-made opportunity to get in front of students and share good information about your company, jobs in your industry, and the education and skills students need to succeed.

What Is a Career Fair?

Many schools sponsor Career Fairs (also known as Career Days) to introduce students to the wealth of job and career opportunities available with local employers. For these events, employers usually set up booths or tables where they can provide students with materials or show multimedia presentations about their companies, while answering student questions. Career Fairs generally are targeted to high school-age students who are beginning to think about college and careers, but they can also target younger students.

In addition to giving students an opportunity to visit with many employers individually, Career Fairs also can include group presentations for all students by employer representatives, college and career counselors, and other speakers. Some Career Fairs also incorporate mock interviews (see page 35) and other activities.

If you are going to do a more formal presentation as part of the Career Fair, please see *Section 2: Classroom Visits, page 21*, for some presentation pointers.

The Benefits Of Career Fairs

Benefits for the student:

- Students learn about jobs and careers in various fields, including salaries.
- Students have opportunities to meet individually with professionals and ask questions about their work, their companies, and their industries.
- Students gain a better understanding of the skills and education required for jobs in various industries and fields.

Benefits for the employer:

- Employers have the opportunity to nurture student interest in jobs and careers with their company and in their industry.
- Employers can help students understand the education and skills they need to secure jobs with their companies.
- Employers are part of an event showcasing a range of local companies that are committed to supporting education and future employment for today's students.

Benefits for the employee volunteer:

- Employees gain valuable experience as ambassadors for their companies and industries.

- Employees have the opportunity to ‘give back’ by nurturing the next generation of the workforce.
- Employees enjoy greater job satisfaction after creating an enriching experience for students.

Making It Effective and Educational

BEFORE THE CAREER FAIR

Ask about logistics. Establish contact with the school or the career fair organizer so you know the agenda for the day and what is required of presenting companies. Here are some questions to ask:

- How much/what kind of space will we have for our booth/table? To what extent will we be able to decorate the space with banners, signage, etc.?
- How long will the career fair last?
- How many employees should we bring?
- Will electricity be provided? Is there wireless Internet access?
- What equipment do we need to bring—e.g., audio/video, easels for signage, power chords?
- Can we use video (if appropriate)?
- Is it OK to bring handout materials and giveaways (pens, etc.)?
- Are students roaming from booth to booth at random, or is the school encouraging them to sign up for one-one-one conversations with specific employers?

Ask about what’s happening in the school. Speak with the school or career fair organizer about the students and what they are doing in school:

- What is the background of the students attending the career fair? Do they have any prior knowledge of STEM jobs or STEM careers?
- Are there specific school-wide themes, initiatives, career/technical education programs, or afterschool programs that address STEM? If so, what are they, and how can the career fair reinforce or build on the lessons they impart?
- Is the school asking students to document or reflect on what they have learned at the career fair? What can presenters at the career fair do to lay the groundwork for those activities?

For other tips on questions for teachers and schools, see “How Can You Put the ‘Learning’ in Work-Based Learning?” page 6.

Bring a video. Consider bringing a video about the company to air at your booth throughout the event. Talk to colleagues in recruiting and marketing to see what is available that would be appropriate for student audiences. (A broad overview of the company or industry is best, with minimal jargon.) If nothing exists, consider putting together a video of interviews with various employees about their jobs—what they do on an average day, and the skills and education their jobs require.

Bring leave-behinds and giveaways. Make sure you have attractive, informative, and, if possible, exciting materials to share about your company, including brochures and other handouts. Don't bring highly technical or jargon-filled materials. You should also consider bringing notepads, pens, or other giveaway items for students who stop by your booth. Think of clever giveaways that highlight what the company makes or does. Ask the school how many giveaways and other materials you should bring.

Pack a sign to spruce things up. Bring a banner or company signage you can use to "brand" your space and make it more attractive.

Check your seating. Make sure you have chairs available for one-on-one conversations with students. You may also want extra chairs so students can sit and watch your video or multimedia presentation.

DURING THE CAREER FAIR

Count the numbers. Keep track of how many students you talked to during the day.

Arrive with answers. Be prepared to talk with students about the following topics:

- What does your company do, and to what extent is it operating in a thriving industry?
- Why is your company's work important and relevant? What key problems does the company address in the world?
- How does the company express its values through activities such as honoring diversity, supporting important community causes, protecting the environment, etc.?
- What are the job and career opportunities in your company and your industry?
- Are these job opportunities likely to increase in the years ahead, and in what job areas do you see the most growth?
- What it is like to do your work (including a description of your typical day and your responsibilities)?
- How does your work make the world a better place?
- What are the educational and skill requirements for people in your position? For others in the company and the industry?
- What are some of the skills you apply on the job on an everyday basis, including math, science, writing, communications?
- How much do you work alone, and how much do you work as part of a team?

Remember that you will probably have only a few minutes to chat with each student who comes by. Be prepared to give an elevator speech about your company and job that lends itself to follow-up questions from the student.

For additional tips on how to speak to a young audience about STEM careers, see “How Do You Connect With Young People,” page 8.

Make an impression. Leave students with an exciting picture of what it is like to work at your company, and make sure they understand what skills/degrees/certifications they need to enter a career in your industry.

Following Up

Reach out and say thanks. Follow up with the school after the career fair to express your thanks and to offer additional support and resources for students, as appropriate.

Think about what's next. Consider offering follow-up activities to give students an even closer look at your company and jobs in your industry, such as job shadowing, company tours, and other activities explored elsewhere in this guidebook.

Resources

1. Career Fair Materials Checklist

This checklist should help you determine if you are bringing everything you need to a Career Fair so you can leave a good and lasting impression.

- ✓ Banners/signage for your company's booth
- ✓ Brochures and other handouts about the company
- ✓ Short video presentation about the company and its employees
- ✓ “Freebie” giveaways for students—pens, notepads, stickers, etc.
- ✓ Sign-in sheet
- ✓ Business cards
- ✓ Drinking water
- ✓ Adequate seating
- ✓ Power cables/laptops/video screens/other technology (as needed)

ACTIVITIES

SECTION 2

Classroom Visits

Schools across the country have been inviting local professionals into the classroom for decades to talk about their work and careers in their fields. These classroom visits are a great opportunity to help students understand the relevance of their classroom work and gain exposure to STEM jobs and careers.

What Is a Classroom Visit?

During a classroom visit, one or more professionals from a local employer share information with students about their jobs and careers. Visiting professionals often lead fun activities or demonstrations that help students see how the topics they are studying in class are relevant to the employee's day-to-day work.

A good classroom visit also includes plenty of time for the professionals to answer student questions about their jobs, the educational and career paths that got them to where they are today, and how students can best prepare for careers in their fields.

Don't Just Visit the Usual-Suspect Schools ...

Classroom visits are often initiated by schools or teachers in search of STEM professionals who can speak to their students. Yet companies and their employees can also get the ball rolling by reaching out to local schools.

When identifying schools for classroom visits, employers should not just focus on the usual suspects—those schools where employees' children tend to be enrolled. In fact, classroom visits will have the most impact in schools where students do not have regular exposure to adults working in jobs and careers that require college degrees and advanced technical training. Employers should consider reaching out to schools in lower-income neighborhoods, for example, to showcase STEM jobs and careers to a more diverse population of students.

The Benefits of Classroom Visits

Benefits for the student:

- Students get to meet with actual professionals and gain real-world insights into jobs and careers in the STEM fields.
- Students gain a fresh appreciation of how workers use the STEM skills taught in class every day.

Benefits for the employer:

- Employers have the opportunity to nurture student interest in jobs and careers with their company and in their industry.

- Employers can help students understand the education and skills they need to secure jobs with their companies.
- Employers advance their reputation as supporters of education and community leaders among school leaders, teachers, parents, and students.

Benefits for the employee/presenter:

- Employees have an opportunity to connect with local students and pause and reflect on their jobs and careers and the skills they use every day.
- Employees gain valuable experience in public speaking and in serving as ambassadors for their companies and industries.
- Employees increase their job satisfaction after connecting with youth in their communities.

Making It Effective and Educational

BEFORE THE VISIT

Reach out and ask about logistics. Establish contact with the school or the classroom teacher so you know the agenda for the presentation and what is required of you as a presenter. Here are some questions to ask:

- How much time can the teacher spare for the visit?
- How many students will be in the room?
- How many employees can/should we bring?
- Can we use video, slides, or other media (if appropriate)?
- What equipment do we need to bring—e.g., audio/video, laptop for slides, etc.?
- Is it okay to bring handout materials and giveaways (pens, etc.)?

Connect it to the classroom. Find out who the students are and what they are learning *right now* in the class that could become fodder for your presentation and any hands-on demonstrations. Questions for the teacher include:

- What is the background of the students in the class? What do they already know about STEM jobs or STEM careers?
- What is the teacher's motivation for including this visit in his or her plans?
- What are students currently learning in their math and/or science classes? What general topics seem to excite them? What topics are they struggling with?
- Are there plans to have students report or reflect on what they have learned from the class visit? How can the visit lay the groundwork for this reflection?

For other tips on questions to ask teachers and schools, see “How Can You Put the ‘Learning’ in Work-Based Learning?” page 6.

Consider teaming up with someone else. If you think one visitor won’t give students a complete picture of the variety of jobs and careers in your company and your industry, consider bringing one or two more with you. Select colleagues who represent different aspects of the company’s work, different skill sets and educational backgrounds, as well as diversity in terms of gender and race/ethnicity. Also bring younger employees who might be able to relate to students more readily. Too many visitors can make for a confusing presentation, so try to keep it to two or three, tops.

Bring your gear. Think about any special equipment you use in your job that might be interesting to show the students. This could include lab equipment, outdoor gear, protective equipment, cool software, etc. Better yet, consider integrating that equipment or software into an interactive session where students can get some hands-on experience of work in STEM. Of course, any activities have to be safe for the students. Clear your plans with the teacher and your company first.

Bring leave-behinds and giveaways. Make sure you have attractive, informative, and, if possible, exciting materials to share about your company, including brochures and other handouts. Don’t bring highly technical or jargon-filled materials. Also consider bringing notepads, pens, or other giveaway items for students. Think of clever giveaways that highlight what the company makes or does. Ask the teacher how many giveaways and other materials you should bring.

Bring video. Consider bringing a short video about the company to air during the presentation. But make sure any video you use is short (no more than two or three minutes) and that it’s appropriate for the age level of the students—i.e., no jargon. Talk to colleagues in recruiting and marketing to see what is available. If nothing exists, consider putting together a video of interviews with various employees about their jobs—what they do on an average day and the skills and education their jobs require.

DURING THE VISIT

Dress the part. Don’t “dress up,” “dress down,” or dress differently than you would on a normal day at work. Wear your work clothes (lab coat, outdoor gear, suit and tie) so students see how you look on an average day.

Be a greeter. If possible, greet the students at the door with a handshake as they come into the classroom. This creates a personal connection to the students and models positive workplace behaviors they will need to sharpen over time.

Give students something exciting to do. Many students think it's boring to just sit and listen to someone talk. Engage them in the steps of conceiving and designing a solution to a problem your company tries to solve. For example, have them discuss a product in your industry and how it could be improved. Take them through the process of writing simple computer code that does something fun. There are endless possibilities for interactive projects you can do with students, but each one requires serious thought and careful planning before the event—often in consultation with the teacher. The best projects connect to what students are learning in the classroom, demonstrate real-world challenges STEM professionals have to wrestle with, are fun and exciting, and engage as many students as possible.

Arrive with answers. Be prepared to talk with students about topics such as:

- What does your company do, and to what extent is it operating in a thriving industry?
- Why is your company's work important and relevant? What key problems does the company address in the world?
- How does the company express its values through activities such as honoring diversity, supporting important community causes, protecting the environment, etc.?
- What are the job and career opportunities in your company and your industry?
- Are these job opportunities likely to increase in the years ahead, and in what job areas do you see the most growth?
- What it is like to do your work (including a description of your typical day and your responsibilities)?
- How does your work make the world a better place?
- What are the educational and skill requirements for people in your position? For others in the company and the industry?
- What are some of the skills you apply on the job on an everyday basis, including math, science, writing, communications?
- How much do you work alone, and how much do you work as part of a team?

While you don't need to answer all these questions, you should be prepared to leave students with an exciting picture of what it is like to do your job, and what kind of educational pathway they need to take to follow a career in your industry.

Don't run off. Talk to the school or the teacher in advance about whether you can stick around to share lunch with students or answer questions after class.

Following Up

Reach out and say thanks. Follow up with the school after the presentation to express your thanks and to offer additional support and resources for students, as appropriate.

Evaluate it. In your follow-up contacts with the school, evaluate whether the classroom visit met the school's goals and your goals. For more ideas on evaluation, see "How Can You Put the 'Learning' in Work-Based Learning?" page 6.

Think about what's next. Consider offering follow-up activities to give students an even closer look at your company and jobs in your industry, such as job shadowing, company tours, and other activities explored in this guidebook.

Resources

10 Tips for Making a Strong Presentation

- 1. Be prepared.** Just because you are speaking to a group of students (vs. making a more formal business presentation) doesn't mean you can wing it. Outline your talk and practice it a few times before you get there so you have it down pat.
- 2. Don't read.** It's hard to connect to your audience if you are reading from a script and looking down all the time. Bring notecards or notes so you can move easily from key point to key point, but make sure to maintain eye contact with the group throughout.
- 3. Get there early.** Arriving just in time or a few minutes late is a sign that the presentation is not important to you—and it can add to your stress level. Get there early so you can get a feel for the room and figure out your needs in advance (water, power, video, etc.).
- 4. Tell a good story.** People of all ages like a good story. Ground your visit in engaging anecdotes about your own time as a student, how you got your job, and your experiences on the job. We all have good stories to tell—think about yours.
- 5. Keep it simple.** Any audience (and especially an audience of young students) will be put off and confused if you try to focus on too many topics. Keep your presentation focused on three or four things you want students to know about your job and your company. And avoid the jargon—be sure to explain acronyms and workplace lingo.
- 6. Go easy on the PowerPoints.** PowerPoint slides should never be the focus of a presentation. If you are using slides, make them simple and brief and don't include too many.

7. Take. It. Slow. All of us tend to speed things up when we are speaking in public. Remember to talk slowly and to pause between sentences and ideas so they can sink in.

8. Project your voice. Teachers know how to command a classroom with their voice. Imagine you are talking to the students in the back row, and keep your head up so you are not talking down at your notes.

9. Keep it short. Shakespeare said it best: "Brevity is the soul of wit." Keep your presentation short and animated, and save ample time for student questions and hands-on activities.

10. Add a little humor. Think about humorous experiences you had as a student, or funny experiences you have had on the job. Humor creates a strong connection with your audience and makes you more approachable.

For more ideas about how to speak to a young audience about STEM careers, see "How Do You Connect With Young People," page 8.

ACTIVITIES

SECTION 3

Company Tours

Beyond occasionally visiting parents at work, many students have very little idea about the day-to-day rhythms and requirements of the workplace. Providing opportunities for students to tour your workplace helps them gain a firsthand understanding of the world of work, as well as the technologies and skills employees use in STEM-related jobs.

What Is a Company Tour?

A company tour is an activity that brings students to a workplace to learn more about a company and its industry, observe employees in their normal work routines, and ask questions of employees. During the tour, employees can demonstrate the equipment and technology they use on an everyday basis while highlighting the core skills and knowledge they apply in their jobs.

Company tours can include both walking tours of the workplace and sit-down presentations by employees about their work. Many employers also include lunch as part of the program, with students joining employees in the cafeteria or for a brown-bag discussion. Tours can include student groups of any size, but employers might consider breaking large groups into two or more smaller ones to facilitate more one-on-one interaction between students and employees.

Schools or teachers can initiate company tours by reaching out to local employers. Companies can also initiate them by offering tours to schools in their communities. Tours can be for students at all grade levels, from elementary through high school.

The Benefits of Company Tours

Benefits for the student:

- Students get to see an actual workplace and get a firsthand feel for what it's like to work in the employer's industry.
- Students meet with professionals and gain real-world insights into jobs and careers in the STEM fields.
- Students gain a fresh appreciation of how workers use the STEM skills they are learning in class every day.

Benefits for the employer:

- Employers have the opportunity to nurture student interest in jobs and careers with their company and in their industry.
- Employers can help students understand the education and skills they need to secure jobs with their companies.
- Employers advance their reputation as supporters of education and community leaders among school leaders, teachers, parents, and students.

Benefits for the employee/presenter:

- Employees have an opportunity to connect with local students and reflect on their jobs, their careers, and the skills they use every day.
- Employees gain valuable experience in public speaking and in serving as ambassadors for their companies and industries.
- Employees increase their job satisfaction after connecting with youth in their communities.

Making It Effective and Educational

BEFORE THE TOUR

Coordinate with the school or teacher about logistics. Establish contact with the school or the classroom teacher so you understand their expectations and requirements. Here are some logistical questions to discuss:

- How long should we schedule for the tour? (Note that student tours often last for 60 to 90 minutes; for longer tours, you might want to include more breaks for Q&A time, hands-on activities and other opportunities to break out of the mode of “talking at” the students.)
- How many students will be on the tour? How many teachers and other adults?
- Can the tour include lunch?

During your up-front communications with the school or teacher, make sure they have the information they need to make the visit a success, including:

- Where to park/what entrance to use;
- Where you will meet them;
- What safety requirements students and adults on the tour will have to follow;
- What students and teachers should wear (are your facilities cold/hot?);
- What else to bring (bag lunches, water, etc.).

Choose the route. Some parts of your company may be clearly off limits to visitors. Decide well in advance what parts of your facility are both accessible and interesting to young visitors.

Play it safe. Depending on the nature of your company and its operations, opening the doors to a student group may require you to follow important safety precautions. See “Safety Checklist for Student Tours,” below, for more on how to make the tour a safe experience for all.

Connect it to the classroom. Find out who the students are and what they are learning *right now* in the class that is relevant to the company's operations and what its employees do on a day-to-day basis. Questions for the school or teacher include:

- What is the background of the students in the class? What do they already know about STEM jobs or STEM careers?
- Are there any questions about STEM jobs or careers the students should be able to answer after the tour?
- What are students currently learning in their math and/or science classes? What general topics seem to excite them? What topics are they struggling with?
- Are there plans to have students report or reflect on what they have learned from the company tour? How can the company tour lay the groundwork for this reflection?

Answers to these questions can help you structure a tour that best meets the schools and students' needs.

For other tips on questions to ask teachers and schools, see "How Can You Put the 'Learning' in Work-Based Learning?" page 6.

Line up a variety of employees to speak to students. One employee may end up leading the tour, but make sure to involve other workers so students have a complete picture of the variety of jobs and careers in your company and your industry. Make sure featured employees represent different aspects of the company's work, different skill sets and educational backgrounds, as well as diversity in terms of gender and race/ethnicity. Young employees can be especially good at connecting with youth.

Be sure to prep all employees who will be presenting to the students so they understand their roles. Consider sharing some of the presentation tips and pointers offered elsewhere in this guide with all employees who will be participating in the tour. See Section 2: Classroom Visits, page 21, and "How Do You Connect With Young People," page 8, for more on effective presentations.

Organize hands-on activities if possible. Think about how to get students involved in your company's work in a more direct way. Can they give some of the equipment a test run? Can they create an artifact of your company's product to take home? Can they get their hands on some of the raw materials that go into your products? Of course, safety should be your primary concern when creating opportunities for students to experience your company's operations in a more direct way. See "Safety Checklist for Student Tours," below, for more on how to play it safe.

Schedule a lunch or water/snack break. If students are going to be on site for more than an hour or two, talk to the school or teacher about including lunch or a snack break on the agenda. This might be an opportunity for students to sit briefly with employees and talk in a more casual way about their jobs.

DURING THE TOUR

Welcome students with a quick orientation. Invite students to gather in a conference room or other large space for a quick overview of the company and its industry, history and operations, as well as any safety tips they need to know. Discuss how many people work for the company, and provide a quick overview of the various types of jobs they hold, as well as what STEM skills they have to apply in those jobs. Give the students a preview of what they are going to see on the tour. Consider using a brief (no more than three-minute) video or slide presentation as part of the orientation. And make sure to point out where restrooms and water are as part of your orientation.

Showcase cool technology and equipment. Have employees demonstrate some of the technology and equipment they use on a day-to-day basis during the tour. This could include lab equipment and other machinery, computer and video systems, and more. The more state-of-the-art, the better. Make sure to explain what skills employees need to operate the equipment, as well as how the equipment helps them do their jobs.

Be prepared with answers. Make sure all employees are prepared to talk with students about the following topics:

- What is your job with the company?
- What was your pathway to the job? What did you study in school, and what level of education do you have?
- What were your plans when you were the age of the young people on the tour?
- What is it like to do your work (including a description of your typical day and your responsibilities)?
- What are the educational and skill requirements for people in your position? For others in the company and the industry?
- What are some of the skills you apply on the job on an everyday basis, including math, science, writing, and communications?
- How much do you work alone, and how much do you work as part of a team?

Save time for Q&A. Both during the tour and after the tour, make sure to open things up to questions from the students. Create Q&A moments throughout the tour as the students encounter different aspects of the company operations and as they talk with different employees. Remember: almost every question is a good question.

Make an impression. Leave students with an exciting picture of what it is like to work at your company, and make sure they understand what skills, degrees, or certifications they need to enter a career in your industry.

Provide takeaway materials and freebies. Make sure you have attractive, informative materials to share about your company, including brochures and other handouts students

can take home. Avoid highly technical materials or materials that are full of jargon. Can you share an example or artifact of a company product? Consider putting those materials in a gift bag for each student, along with company freebies such as notepads, pens, or other giveaway items.

Following Up

Evaluate it. In your follow-up contacts with the school, evaluate whether the classroom visit met the school's goals and your goals. For more ideas on evaluation, see "How Can You Put the 'Learning' in Work-Based Learning?" page 6.

Think about what's next. Speak with the school or teacher about offering follow-up activities to give students an even closer look at your company and jobs in your industry, such as job shadowing and other activities explored elsewhere in this guidebook.

Resources

Safety Checklist For Student Tours

- ✓ Coordinate with your company's security office about identification requirements and badging, as well as other policies for visitors.
- ✓ Ensure that none of the tour occurs in areas that are off-limits to visitors.
- ✓ Make sure all students and adults on the tour receive relevant safety instruction.
- ✓ Advise all tour participants about the "rules of the road" for the tour—no wandering off, wear safety equipment as appropriate, etc.
- ✓ Provide necessary safety gear for all participants—eye goggles, earplugs, hard hats, gloves, etc.

Please see "What Logistical Issues Should We Be Thinking About?" on page 11 for more considerations about enlisting the help of your security office and other company personnel long before the tour.

ACTIVITIES

SECTION 4

Mock Interviews

Students often have limited experience applying for and interviewing for jobs. A mock interview allows them to think about what they offer to prospective employers, how to present themselves and articulate their strengths, and how to make the case that they are right for the job.

What Is a Mock Interview?

A mock interview allows students to practice interview techniques and get feedback and coaching on their interviewing skills. Generally, mock interviews are an activity for older students (high school juniors and seniors) who are beginning to think more seriously about jobs and careers as they continue their education.

In a mock interview, the interviewer is a professional who plays the role of the prospective employer, and the interviewee plays the role of the job candidate. Staying “in character” is important for both participants; the more realistic the interview feels, the better learning experience it will be for the student.

Students prepare for mock interviews in the same way that job candidates prepare for real interviews—by researching the company and available jobs, weighing the strengths they offer as a job candidate, and making sure to dress appropriately. Interviewers can prepare by learning in advance about the student’s interests, academic qualifications and work experience and weighing key questions to guide the conversation.

The mock interview generally lasts from 25–45 minutes. Following the interview, the interviewer should provide feedback to the student on how it went.

The Benefits of Mock Interviews

Benefits for the student:

- Students gain valuable experience articulating the unique strengths and skills they offer a prospective employer.
- Students sharpen their understanding of where they need to develop and hone their strengths in preparation for the labor market.
- Students gain insights into the real-world process by which employers screen and select employees.
- Students get feedback on their presentation skills and pointers on how to conduct a strong interview.

Benefits for the employer:

- Employers have the opportunity to nurture student interest in jobs and careers with their company and in their industry.
- Employers can help students understand the education and skills they need to secure STEM jobs with their companies.
- Employers advance their reputation as supporters of education and community leaders among school leaders, teachers, parents, and students.

Benefits for the employee/presenter:

- Employees have an opportunity to forge personal connections with young people as they help them understand what it takes to find good jobs and careers in today's workforce.

Making It Effective and Educational

BEFORE THE MOCK INTERVIEW

Clarify the job opening. Let the school or teacher know what kind of job openings the company has and will be interviewing for and the skill requirements for those jobs. This gives the student an idea of how to approach the interview and what skills to emphasize.

Learn about the interviewee. Contact the school or teacher so you have some basic information about the students you will be interviewing. Encourage schools to have students send resumes or letters outlining their key skills, experiences and interests. Then you can use this information to tailor your questions appropriately, e.g. "I see you are part of the robotics club. Tell me what you have learned through that experience about what it takes to carry out a successful project."

Note that letters and resumes should not contain students' personal contact information, nor should you contact students directly. If you need to reach out to students for any reason, always do so through the teacher or school.

Send company information. Make sure the school and the student have information about the company so the student can prepare for the interview. Send links and/or print materials describing the company and its industry and workforce.

Prepare key questions. A good interview should flow like a conversation. If it is too scripted, it will seem uncomfortable for both participants. That said, you will want to have a basic set of questions prepared so you can make sure you cover key points and keep the conversation flowing. Core interview questions you might want to cover include:

- What is your strongest subject in school? Your favorite subject? Your most challenging subject? Why?
- What are your interests outside of school?
- What experiences—in or out of school—have prepared you for the STEM job in question?
- What are your personal strengths? Weaknesses? How do you address those weaknesses?
- Do you work better independently or in groups?
- How do you handle failures? Successes?
- How do you motivate yourself when you have to do something that might seem tedious?

- Have you ever had to work with someone whom you found it hard to work with? What did you do to try and improve the situation?
- What is your most significant accomplishment to date? How does that accomplishment prepare you for a career in STEM?
- Where do you see yourself professionally in five years? 10 years? How will you ensure that you meet those professional goals?

Pin down the logistics. If the informational interview is taking place at the company, you will have to resolve some logistical questions well in advance. For example:

- Does the student have transportation? If not, who will provide it?
- What company entrance should the student use?
- Where will you meet the student?
- Have you met all your companies' security procedures to bring a student on site?

Eliminate distractions. Make sure you prepare for the interview by blocking off your calendar so you can give the interviewee your full attention. Plan to turn off your cell phone, put your computer in sleep mode, and send all calls to voicemail.

DURING THE MOCK INTERVIEW

Stay in character. Be engaging and personable, but remember your role as an employer sizing up a prospective employee. Treat it like a normal interview by sticking to your core questions and probing for strong, detailed answers that help you understand who this person is, what skills and experience he or she would bring to a job, and his or her strengths as well as weaknesses.

Push past pat answers. Don't settle for "yes" or "no" answers. If a question you ask does not elicit the kind of answer that helps you understand the person's character and strengths, make sure to follow up. Keep the "why" question at the front of your thoughts as the interviewee is talking. If she says she likes a certain subject or class, for example, ask her why, and how it prepares her for the job. If she says she likes to work in teams with other students, ask what it is about working in teams that appeals to her. And be sure to press for examples or anecdotes. For example, if the interviewee says that "determination to finish a job" is a strength, ask for a specific example of a time when that strength came into play.

Keep STEM skills front and center. One critical aim of a mock interview for a STEM job is to help students understand the STEM skills and knowledge they will need to succeed in a STEM career. Be sure to ask students about their STEM experiences both in and out of school and how those experiences can prepare them for a job in the STEM fields. Remember not to become too specific. High school students still lack knowledge or experience to qualify for many STEM jobs at your company, but you can still ask general questions that get students thinking carefully about the education pathway that will lead them to a STEM career.

Make it a conversation. Try to remember that this is a conversation. If something the interviewee says is intriguing to you as a window on who he is and the qualifications he would bring to a job, don't worry about straying from your questions and taking the conversation on a temporary tangent. Maybe the interviewee will bring up an interesting life experience that isn't on his resume and that you were not prepared to discuss. Try to go with the flow even as you stay focused on eliciting good information and insights that would inform a hiring decision.

Ask if they have any questions. Close the interview by asking if the interviewee has any questions of you. These could be questions about job requirements, salaries, the key attributes the company is looking for in its employees, etc.

Conclude while still in character. End the conversation by thanking the interviewee for her time and noting that you will be contacting her regarding the next steps in the hiring process.

AFTER THE INTERVIEW

Take notes. While the interview is still fresh in your mind, take a few minutes to jot down notes so you remember some of your key evaluation points.

Offer candid feedback. The point of a mock interview is not just to give a student exposure to what an interview is like. It's also to offer feedback and coaching so students know how to do better. Whether you do it on the spot or in a follow-up communication, offer the student actionable pointers and insights on how it went and how to improve. See "Mock Interview Evaluation Questions," below, for ways to guide your feedback. Again, all outreach to students should go through school or teacher, so use them as a conduit for sending after-the-fact student evaluations.

Look for a thank you note. Interviewers should expect to receive a follow-up thank you note from interviewees. If you do not receive a note in a timely fashion, it may be worth contacting the school or teacher to remind them that a follow-up note is an important part of any interview process.

Following Up

Reach out and say thanks. Follow up with the school or teacher after the interview to offer feedback and additional resources for students, as appropriate.

Evaluate it. In your follow-up contacts with the school or teacher, evaluate whether the mock interview met the school's goals and your goals. For more ideas on evaluation, see "How Can You Put the 'Learning' in Work-Based Learning?" page 6.

Think about what's next. Speak with the school or teacher about offering follow-up activities to give students an even closer look at your company and jobs in your industry, such as job shadowing and other activities explored elsewhere in this guidebook.

Resources

Mock Interview Evaluation Questions

Here are some questions to guide your evaluation of a student's mock interview. Based on your evaluation, you can provide the student with helpful pointers for improvement:

Appearance and Poise

- Was the student on time?
- Was the student dressed professionally and appropriately?
- Did the student appear confident and poised?
- Did the student maintain good posture and eye contact?
- Did the student give an appropriate handshake?

Presentation and Answers

- Did the student appear knowledgeable about the company and the position he/she was interviewing for?
- Did the student answer your questions clearly and substantively?
- Did the student do a good job of articulating the unique skills and experience he/she would bring to a job?
- Did the student succeed in conveying his/her enthusiasm for STEM careers?
- Did the student demonstrate at least some fundamental knowledge of the skills and experience he/she would need to succeed in the STEM career?
- Did the student have stories and examples to share that shine a light on his/her unique abilities and experiences?
- Did the student express enthusiasm and genuine interest in the work of the company? If he/she asked questions, were they insightful and appropriate?

Delivery and Language

- Did the student use proper language and enunciate his/her responses?
- Did the student avoid using distracting mannerisms and phrases ("um," "like," tapping, hair twirling)?

ACTIVITIES

SECTION 5

Informational Interviews

More often than not, the best way to learn about something is to ask questions. Informational interviews offer students a one-on-one opportunity to find out more about jobs and careers in the STEM fields from the experts: STEM workers themselves.

What Is an Informational Interview?

An informational interview is designed to help students learn more about a specific company or industry, as well as the job opportunities and career paths they offer. Unlike a job interview or a mock interview, the informational interview puts the student in the position of asking questions and leading the conversation. As with mock interviews, informational interviews generally are for students of high-school age who are beginning to think about college and careers.

Because the interview is not related to an immediate employment opportunity, it can be a low-stress way for students to explore job and career opportunities in various fields. Informational interviews can last anywhere from 20 to 45 minutes. While face-to-face interviews at the employees' workplace are most likely to be effective, interviews can also take place at the students' school, or by telephone.

Informational interviews are often initiated by schools or teachers who want to give their students career exploration opportunities. Companies can also reach out to schools to offer informational interviews with STEM professionals.

The Benefits of Informational Interviews

Benefits for the student:

- Students learn about jobs and careers in the STEM fields.
- Students make connections with actual professionals who can support them in their future job searches and careers.
- Students learn how to do research on companies and industries, and how to ask probing and appropriate questions so they can learn about job and career opportunities.
- Students practice important workplace behaviors—maintaining eye contact, leading a conversation, showing respect.

Benefits for the employer:

- Employers have the opportunity to nurture student interest in jobs and careers with their company and in their industry.
- Employers can help students understand the education and skills they need to secure jobs with their companies.
- Employers advance their reputation as supporters of education and community leaders among school leaders, teachers, parents and students.

Benefits for the employee/presenter:

- Employees have an opportunity to forge personal connections with young people as they help them understand what it takes to find good jobs and careers in today's workforce.

Making It Effective And Educational

BEFORE THE INFORMATIONAL INTERVIEW

Coordinate with the teacher or school. An informational interview can be a valuable experience if everyone understands how to make the most of it up front. Contact the teacher or school you or your company are partnering with to establish the goals of the informational interview(s) and to clarify student and employer rules. The key message is that informational interviews are led by students, so students need to come prepared. See "Supporting Students to Ask Good Interview Questions," below, for more.

Pin down the logistics. If the informational interview is taking place at the company, you will have to resolve some logistical questions well in advance. For example:

- Does the student have transportation? If not, who will provide it?
- What company entrance the student should use?
- Where will you meet the student?
- Have you met all your companies' security procedures to bring a student on site?

Send company information. Make sure the school and the student have information about the company so the student can prepare for the interview. Send links and/or print materials describing the company, its industry, and its workforce.

Study up. The purpose of the interview is to provide the student with information about the company and the industry you are in. Make sure you are prepared with good answers to questions like these:

- What does your company do, and to what extent is it operating in a thriving industry?
- Why is your company's work important and relevant? What key problems does the company address in the world?
- How does the company express its values through activities such as honoring diversity, supporting important community causes, protecting the environment, etc.?
- What are the job and career opportunities in your company and your industry?
- Are these job opportunities likely to increase in the years ahead, and in what job areas do you see the most growth?

- What it is like to do your work (including a description of your typical day and your responsibilities)?
- How does your work make the world a better place?
- What are the educational and skill requirements for people in your position? For others in the company and the industry?
- What are some of the skills you apply on the job on an everyday basis, including math, science, writing, or communications?
- How much do you work alone, and how much do you work as part of a team?

Eliminate distractions. Make sure you prepare for the interview by blocking off your calendar so you can give the interviewee your full attention. Plan to turn off your cell phone, put your computer in sleep mode, and put all calls to voicemail.

DURING THE INFORMATIONAL INTERVIEW

Watch the jargon. You don't want to patronize or "talk down" to the student, but at the same time you shouldn't assume they know the ins and outs of the business and the industry. Students may be reluctant to tell you they don't know something, so lean on the side of explaining key issues, concepts and technologies. And try to avoid using industry jargon or acronyms; at the very least, explain industry terms as they come up.

Use supporting materials. Think about brochures, maps, organizational charts and other materials that might help the student gain a better understanding of the industry and what you do. Whatever materials you provide should offer a broad overview with minimal industry jargon.

Show your gear. Think about any special equipment you use in your job that might be interesting to show the students. This could include lab equipment, outdoor gear, protective equipment, cool software, etc.

Be specific. Make sure to tell the student about specific experiences and examples that give them an "inside look" at your work and the work of your company. Show them how you apply specific skills to specific tasks, or walk them through the timeline of a specific project to show how your work gets done. The more vivid your account of what you do on a day-to-day basis, the more valuable and memorable the experience will be for them.

If you don't have an answer, don't sweat it. Make sure you are prepared to answer key questions like those outlined above, but if a student throws you a curveball ("What's the average starting salary for people with bachelor's vs. master's degrees?"), tell them you will ask the right people and get back to them if you can find an answer.

Ask a few of your own questions. Students should be in the driver's seat during an informational interview, but toward the end it may be appropriate for employees to ask a few questions themselves. Inquiring briefly about a student's favorite subjects and college

and career goals is a good way to engage the student. It also can provide an opening for a deeper conversation connecting the student's interests and goals to jobs and careers in your field.

Make an impression. Leave students with an exciting picture of what it is like to work at your company, and make sure they understand what skills/degrees/certifications they need to enter a career in your industry.

Following up

Look for a thank you note. You should expect to receive a follow-up thank you note from the student who interviewed you. If you do not receive a note in a timely fashion, it may be worth contacting the school or teacher to remind them that a follow-up note is an important professional courtesy.

Remember: Do not contact students directly. If you need to reach out to students for any reason, always do so through the teacher or school.

Evaluate it. In your follow-up contacts with the school or teacher, evaluate whether the informational interview met the school's goals and your goals. For more ideas on evaluation, see "How Can You Put the 'Learning' in Work-Based Learning?" page 6.

Think about what's next. Speak with the teacher or school about offering follow-up activities to give students an even closer look at your company and jobs in your industry, such as job shadowing, company tours and other activities explored elsewhere in this guidebook.

Resources

Helping Students Ask Good Interview Questions

As noted above, employers can help ensure that an informational interview is a useful experience for all involved by reaching out in advance to a student's teacher or school. Remind them that you are expecting students to come prepared with good questions about the work you do, its importance, the skills or knowledge you need to do the work, and what classes you needed to take to prepare for your career.

Even as you provide pointers or sample questions, remind teachers and schools that students should be creative in their questions. Students should be encouraged to ponder up front what they really want to know about your job and your company, and to prepare their questions accordingly.

ACTIVITIES

SECTION 6

Job Shadows

Job shadows introduce students to the realities of today's workplace and the skills they need to succeed, while providing employees with an enriching opportunity to share their hard-won knowledge and experience.

What Are Job Shadows?

Job shadows give students an opportunity to follow a working professional during a day or more of typical work activities. Students can benefit from “exploratory” or “extended” job shadows:

- In an exploratory job shadow, students come to the workplace to shadow a professional for a short period of time (typically 4–8 hours).
- Extended job shadow experiences can last several days or even weeks and offer students a more-in-depth look at an employee’s responsibilities and daily work. Students in extended job shadows are not expected to perform actual work functions as in an internship. However, job-shadowing students are sometimes compensated for their time.

In both cases, the job shadow experience can be supplemented with other activities aimed at educating the student about an employer and its industry. Job shadows are an activity aimed at high school students who are beginning to think about college and careers.

Job shadows can happen on an individual basis, with one student visiting a workplace alone. Alternatively, schools and employers can arrange for group job shadowing events, where several students spend time at an employer’s worksite and participate in both group activities and one-on-one job shadow experiences with employees. Coordinators at participating schools and companies work together match students with professionals who work in areas that are most likely to interest them.

The Benefits of Job Shadows

Benefits for the student:

- Students have a chance to learn firsthand how employees apply skills and knowledge to accomplish important work tasks and solve problems.
- Students have the opportunity to interact with their job shadow host, colleagues and clients and see teamwork and 21st-century job skills in action.
- Students learn more about careers in the fields they may be interested in pursuing.
- Students learn about the rhythm and requirements of the workplace, in areas from punctuality and dress to norms and behavior.
- Students gain a valuable experience for college and work resumes.

Benefits for the employer:

- Employers provide students with an up-close look at job and career opportunities in their industry.

- Employers spark student interest in careers in the industry while showcasing their commitment to furthering the education and development of young people.
- Employers also demonstrate to students in an in-depth way the importance of developing and honing key skills that will serve them well in the workplace.

Benefits for the employee/volunteer:

- Employees have an opportunity to reflect on their work and the key skills that make them effective, and to share their knowledge and experience.
- Employees gain valuable mentoring experience and greater job satisfaction by creating an enriching experience for students.

Making It Effective and Educational

BEFORE THE JOB SHADOW

Play it safe. Depending on the nature of your company and its operations, opening the doors to students may require you to follow important safety precautions. See “Safety Checklist for Job Shadows,” below, for more on how to make the job shadow a safe experience for participating students.

Coordinate with the partner school or organization. Maintain contact with the teacher or school so you know their requirements and expectations. Ask what students are doing in class that could be reinforced during the job shadow experience. For example:

- What is the background of the students attending the job shadow? What do they already know about STEM jobs or STEM careers?
- What are the students currently learning in their math and/or science classes? What general topics seem to excite them? What topics are they struggling with?
- Do the students need help with specific “soft” skills like communication or teamwork?
- Are there plans to have students report or reflect on what they have learned from the job shadow? What can you do during the job shadow to lay the groundwork for this reflection?

For other tips on questions to ask teachers and schools, see “How Can You Put the ‘Learning’ in Work-Based Learning?” page 6.

Make sure students are prepped. Provide the teacher or school with links/materials so students come to the job shadow with a basic understanding of the company and industry. Advise the school that students should practice good professional behaviors by calling the worksite a day in advance to confirm the meeting time and place.

WELCOMING THE STUDENTS

Start with who you are. Describe your job and the education and experiences that helped prepare you for your current position.

Paint a quick picture of the company. Share an overview of your company including your products and services and organizational structure. Keep this at a very high level. There is no need for a long presentation; more detail about the company and industry will likely emerge in the course of the job shadow.

Keep safety first. Include a standard workplace safety presentation to ensure the student understands how to respond in the event of an emergency.

Take a tour. Lead the student on a brief tour of the workplace and explain the roles of different people and departments in the company's success. Make sure to point out emergency exits, restrooms and availability of water/refreshments during the tour.

DURING THE JOB SHADOW

Don't make it all about you. Make sure to stimulate a two-way conversation by asking the student questions about his/her own interests and goals: Here are some suggested open-ended questions to ask the student:

- What are your favorite subjects in school?
- Do you have your sights set on specific career?
- What education do you want to pursue after high school, and what would you want to study?
- Why did you want to participate in this job shadow?

Help them understand what you do. Describe your responsibilities and demonstrate what your job is like on a daily basis:

- Help the student understand specific skills and knowledge required to perform your job. Be sure to stress the importance of communication skills, collaboration, teamwork, creative thinking and problem-solving skills.
- Show the student a variety of material you are expected to read and understand in your job (executive briefings, technical manuals, WebEx meetings, instant messaging, internal memos, group emails, government directives, for example).
- Show the student the most interesting aspects of your work. Don't hide it if you have to perform mundane tasks in your job or spend long hours sitting at a desk, but be sure to show students the parts of your job that excite you the most. What taps your creativity? What challenges must you solve? How is what you do important to society? Seeing this kind of work firsthand can inspire young people to follow in your footsteps.

Introduce the student to other employees. Seek opportunities to connect the student to coworkers with different job responsibilities. Showcase entry-level, mid-career and senior-level positions to demonstrate career development opportunities within your company. If possible, choose a racially and gender-diverse group of coworkers. Lunch can be a good opportunity for students to hear from coworkers about their jobs.

Give them something to do. Job shadows can give students a rare opportunity for hands-on experience of what a STEM professional does every day. Is there equipment a student can safely operate? Design software she can explore? A real-world problem she can weigh in on? A collaborative problem-solving meeting she can witness? Employees should look for creative ways to make the experience more memorable by giving students a taste of an authentic work experience.

Talk about performance assessment. Explain how your performance goals are established and how your performance is measured. Here are some suggested open-ended questions to ask the student:

- How do your teachers explain what is expected of you?
- How is your performance measured?
- If students discuss standardized testing, share courses and tests you take to maintain certifications or progress in your career.

Give them something to take home. Share information and materials from your marketing department and college recruiters about your company and career possibilities.

Following Up

Evaluate it. In your follow-up contacts with the school, evaluate whether the job shadow experience met the students, school's, and your goals. For more ideas on evaluation, see "How Can You Put the 'Learning' in Work-Based Learning?" page 6.

Look for a thank you note. Job shadow hosts should expect to receive a follow-up thank you note from participating students. If you do not receive a note in a timely fashion, it may be worth contacting an adult coordinating the job shadows to remind him that a follow-up note is an important part of work-based learning.

Remember: Do not contact students directly. If you need to reach out to students for any reason, always do so through the teacher or school.

Consider staying in touch. Perhaps students can come back at a later time for a follow-up job shadowing experience. In addition, consider offering ongoing mentoring and college and career guidance to students as appropriate, while following company guidelines on communicating with students, especially minors.

Resources

Safety Checklist for Job Shadows

- ✓ Coordinate with your company's security office about identification requirements and badging, as well as other policies for visitors.
- ✓ Make sure all students participating in the job shadow receive relevant safety instruction.
- ✓ Advise all participants about the "rules of the road"—no wandering off, wear safety equipment as appropriate, etc.
- ✓ Where necessary, provide safety gear for all participants—eye goggles, earplugs, hard hats, gloves, etc.

Please see "What Logistical Issues Should We Be Thinking About?" on page 11 for more considerations about enlisting your security office and other company personnel long before the job shadow.

Sample Job Shadow Agenda and Timeline

The following sample agenda and timeline reflect proposed activities based on a group job shadow experience. This can easily be modified to use when hosting an individual student for a job shadow.

Job Shadow Sample Agenda

8:00 Students arrive at your facility

Volunteers greet students and manage security and badging process.

8:15 Escort students to conference room

Volunteers escort students to conference room and help make them comfortable. Light refreshments can be available.

8:30 Welcome and Company Overview

Invite a senior executive to welcome the students and teachers to your company. Provide a brief overview of the company, including your products and services.

Note: Remind your executive they will be talking to students so the overview should be brief. It will be helpful if they can highlight some of the career opportunities available in your company.

8:45 Tour

If possible, break into small groups of 5-8 for the tours. This will allow the students and teachers to have more dialogue with the employees conducting the tours.

9:15 Reconvene in conference room

Students and teachers join their individual job shadow hosts.

10:00 Individual Job Shadows

Employees host students and teachers in their workplace.

12:45 Reconvene in conference room

Invite a senior executive to thank the students and teachers for visiting your facility. Distribute gift bags (if available) and escort students back to buses.

1:00 Students depart

Change the Equation (CTEq) works at the intersection of business and education to ensure that all students are STEM literate by collaborating with schools, communities, and states to adopt and implement excellent STEM policies and programs. CTEq's coalition of members are working toward universal STEM literacy by advocating for state policies and practices that are known to produce STEM-literate high school graduates; ensuring high standards for all students; and supporting evidence-based high quality STEM learning programs.

www.changetheequation.org



1101 K STREET, NW · SUITE 610 · WASHINGTON, DC 20005 · 202 626 5740